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Government  
Publication



CITY OF WINNIPEG  
HYDRO ELECTRIC SYSTEM

SEVENTEENTH  
ANNUAL REPORT  
DECEMBER 31  
1928

WINNIPEG — CANADA





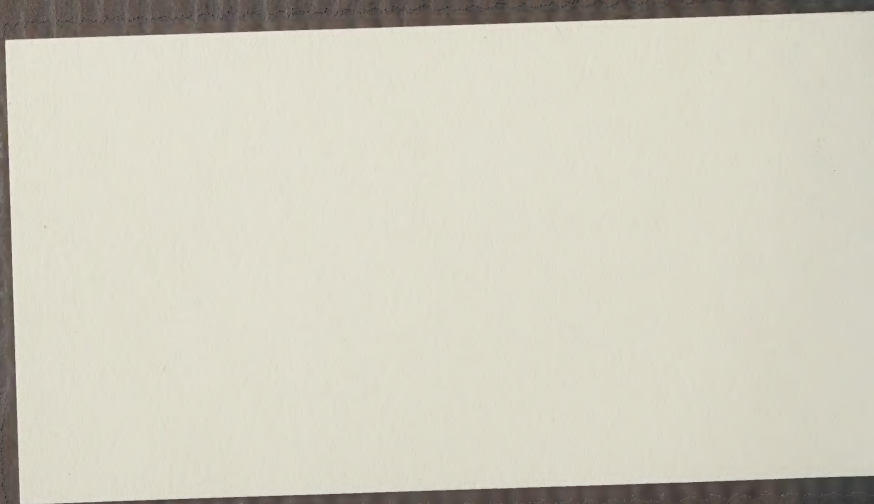


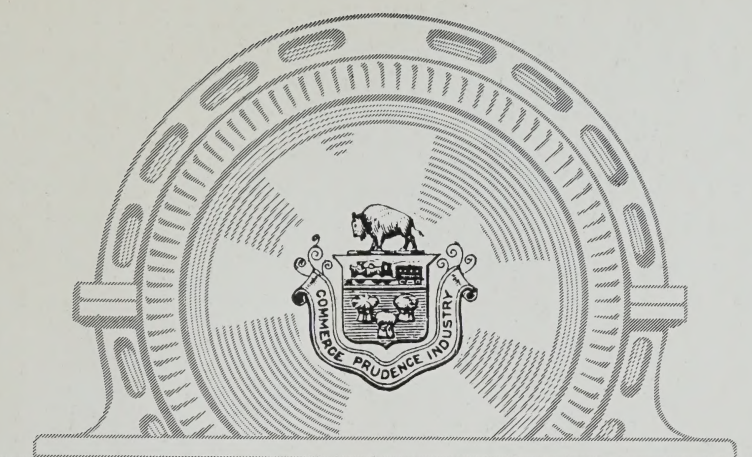




*With the Compliments of  
The Manager*







# CITY OF WINNIPEG HYDRO ELECTRIC SYSTEM

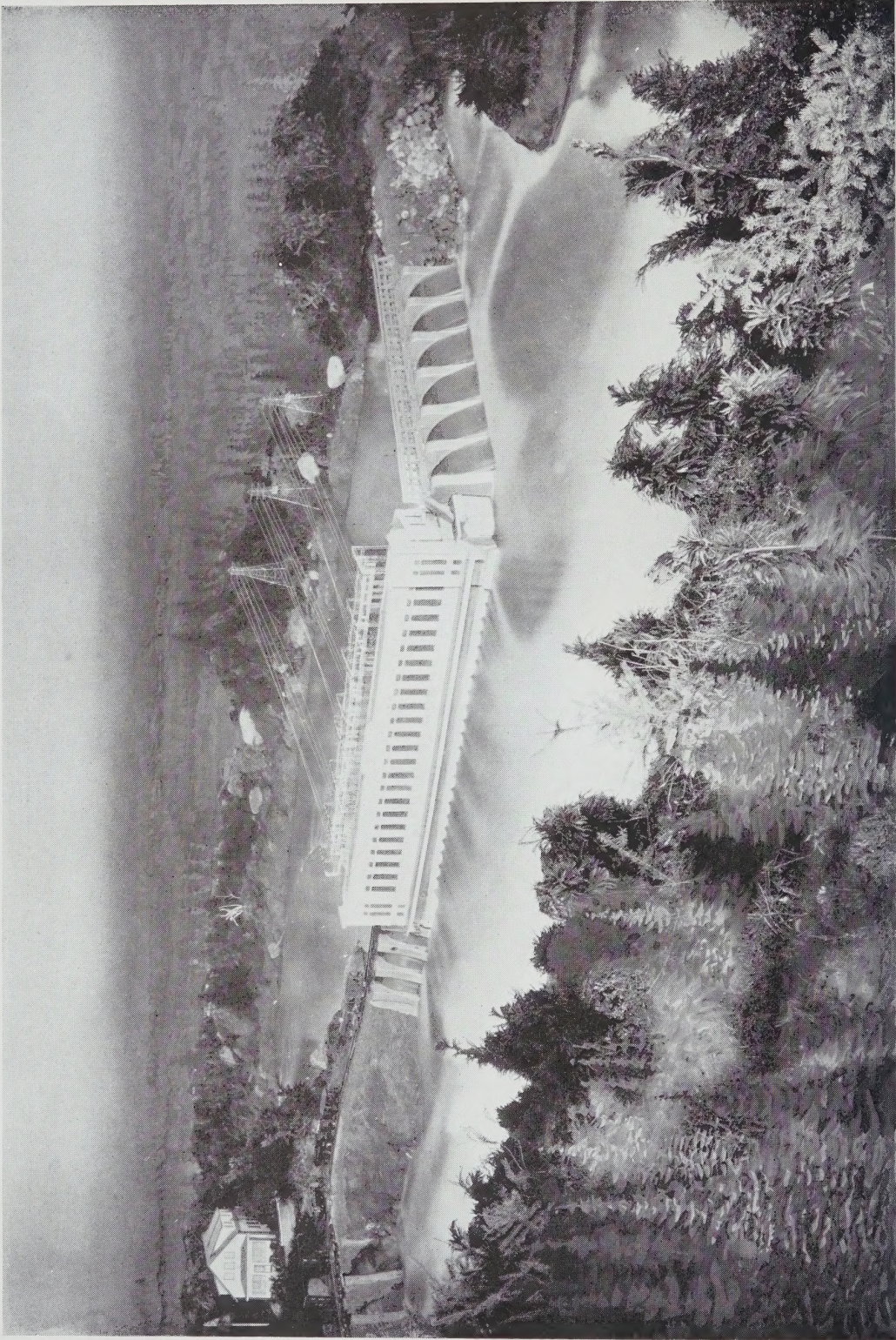
## SEVENTEENTH ANNUAL REPORT

DECEMBER 31

1928

WINNIPEG ~ CANADA





MODEL OF SLAVE FALLS POWER PLANT  
Designed by The T. Eaton Company, Ltd., Winnipeg.



## Manager's Annual Report

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*To the Chairman and Members,  
Committee on Public Utilities,  
City Hall, Winnipeg.*

Gentlemen:—

In every respect 1928 was a satisfactory year for the Winnipeg Hydro Electric System.

In November of that year the citizens of Winnipeg demonstrated in a most emphatic manner their confidence in, and approval of, this utility. The Slave Falls by-law, which was submitted to them in that month, was carried by an outstanding majority, bringing out the largest vote ever polled by the ratepayers of Winnipeg, and attaining the largest majority that any money by-law has been able to register in its favor. The result of this vote had a most heartening effect on all members of the Hydro staff, who are looking forward with keen enthusiasm to the actual beginning of building operations on our new plant at Slave Falls, the estimated cost of which is six and one-half million dollars for the initial, and ten million dollars for the ultimate development.

### RESULT OF VOTING ON IMPORTANT PUBLIC UTILITY BY-LAWS

Date	By-Law	Amount	For	Against	Population
1906	Pointe du Bois Plant	3¼ Millions	2,377	381	101,507
1913	New Water Supply.	13½ Millions	2,951	90	184,730
1928	Slave Falls Plant. . .	6½ Millions	13,126	498	202,377

In a financial way, also, the year was very satisfactory, inasmuch as we broke all records in the matter of earnings and surplus. The consolidated surplus for the year approximated \$290,000.00, while the gross earnings were nearly \$3,600,000.00. There was also a most satisfactory increase in the merchandising turn-over, which was up 12½% over 1927.





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POINTE DU BOIS AND SLAVE FALLS POWER SITES  
Taken from elevation of 5,000 ft.



### *Merchandising---*

A new field in the electric appliance business is the development of the electric refrigerator. In keeping with our policy of furthering the use of all good load-building equipment, our Merchandising Department has set up a separate division for promoting refrigerator sales.

Our efforts are resulting in considerable success, and this new appliance, which no doubt will be in general use in a few years, is a welcome addition to our electric utility business, owing to its very favorable load characteristics.

The sale of electric ranges and water heaters continues to grow apace, there being in 1928, 1,970 ranges and 2,269 water heaters connected to the system, which at the end of last year was supplying no less than 17,502 ranges and 11,205 water heaters.

We conducted a lamp campaign in the fall of the year, which resulted in a sale of 51,000 lamps, bringing the total for the year of this commodity up to 72,894 lamps.

### *Steam Heating---*

On the other hand, the Steam Heating Utility shows a slight reduction in earnings on account of the extremely mild weather in January and December. While there was an operating deficit of some \$3,800.00 in this Division, this was more than compensated for by the off-peak energy which the steam plant used and which netted the Hydro Electric System a revenue of some \$78,000.00. It is encouraging to note that for the first three months of 1929 the Steam Heating Utility shows a surplus of \$54,000.00.

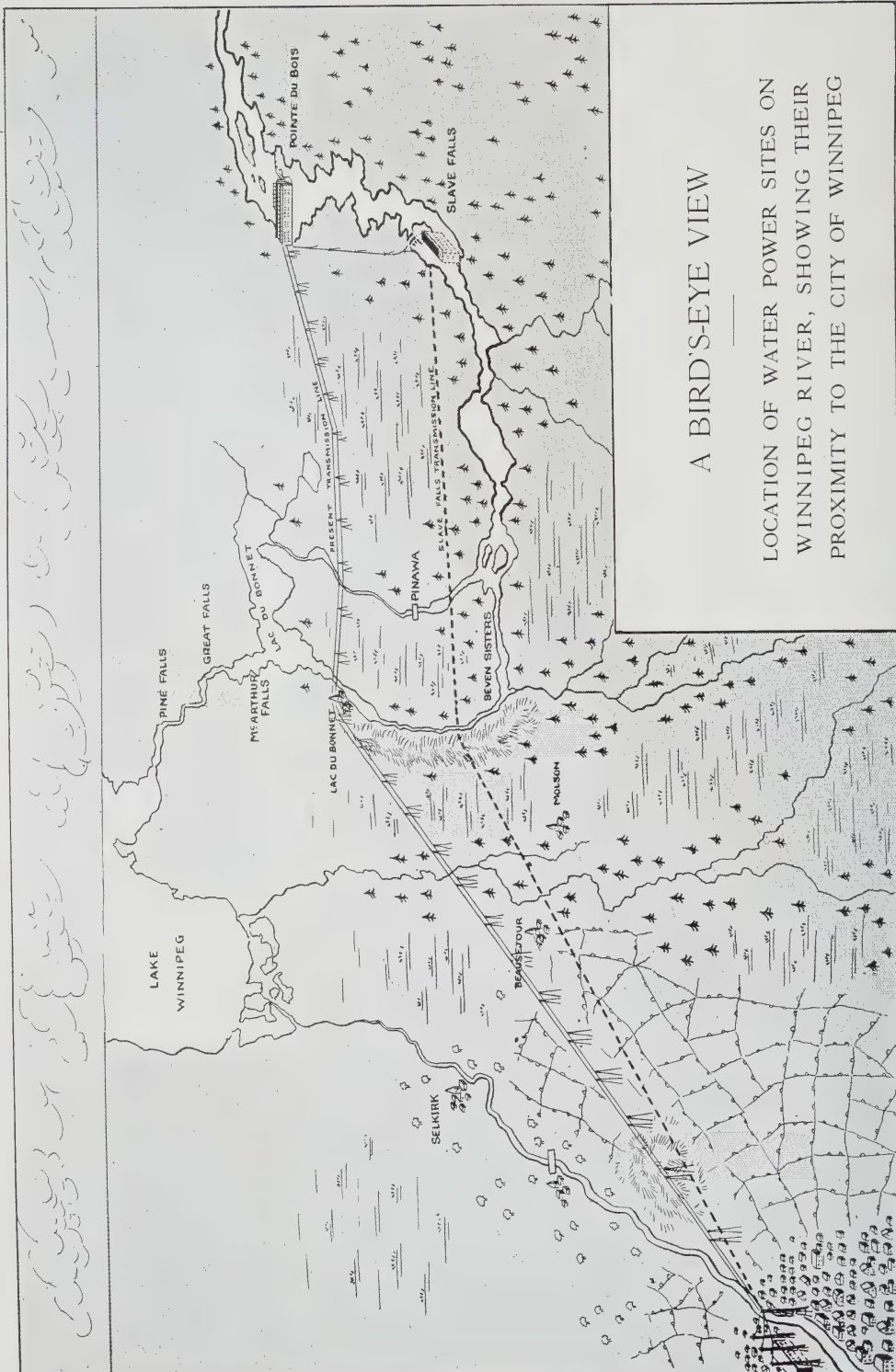
We must have additional boiler capacity in this plant if we are to meet the demand of new customers for central heating service, and to properly safeguard our standby turbine capacity.

### *Rates---*

So much has been heard about our claim of unusually low rates prevailing in Winnipeg that it seems appropriate to submit the following table, the analysis of these rates showing the average revenue for all energy sold to be only  $\frac{3}{4}$  cent per kilowatt hour. The classification of the different services with their kilowatt hour consumption and the average rate received for each service is shown in the following table:

Classification of Service	Number of Services	K.W. Hours Sold	Revenue Per K.W.H.
DOMESTIC:			
Lighting.....	38,022	23,922,819	2.495
Heating and Cooking.....	17,256	40,331,953	.925
Water Heaters.....	10,837	64,413,678	.414





A BIRD'S-EYE VIEW

LOCATION OF WATER POWER SITES ON  
WINNIPEG RIVER, SHOWING THEIR  
PROXIMITY TO THE CITY OF WINNIPEG



Classification of Service	Number of Services	K.W. Hours Sold	Revenue Per K.W.H.
COMMERCIAL:			Cents
Lighting.....	6,112	24,666,275	2.004
Street Lighting.....	7	12,227,042	.571
Municipal Buildings.....	120	2,887,527	1.004
Heating and Cooking.....	576	5,612,450	.943
Water Heaters.....	368	17,533,877	.288
Municipal Heating—Buildings..	64	8,063,653	.288
Steam Heating System.....	3	77,566,300	.1
Off-peak Services.....	3	8,882,660	.141
Power.....	1,074	35,482,459	.926
Municipal Power Buildings.....	49	2,578,772	.833
Municipal Power—Waterworks..	2	5,068,000	.625
	74,493	329,237,465	
Other Municipalities.....	9	1,092,231	1.959
TOTAL.....	74,502	330,329,696	.742*

\*Average rate for all energy sold.

### *Financial---*

The Utility as a whole showed the normal steady growth which it has been enjoying for many years, the annual increase being approximately 10%, both in electrical consumption and in earnings. Our electrical heating and cooking installations continue to show the largest annual increase.

It is important to bear in mind that 1928 was the last year in which we were able to profit from a fully loaded plant without at the same time assuming the burden of fixed charges on a heavy outlay required to take care of our future power requirements by the building of Slave Falls. 1929 will see us shouldering the first instalment of carrying charges on this undertaking, which will be a heavy burden until the plant is in operation and our revenues thereby increased.

The Surplus Revenue Account carried forward to 1929 is \$843,702.39, which should be adequate to meet any operating deficits during the next three or four years. This account, of course, is quite exclusive of our other Reserves, which now total \$6,700,000.00.

We have benefited by another year of uninterrupted service, and the freedom from storms which our Province has enjoyed stands out in bold relief when compared with the disastrous disturbances which have been prevalent in other parts of the continent.

### *Capital Extensions---*

Our properties account for 1928 shows that one million dollars was spent on extensions to the different parts of the system. One-quarter of this amount is chargeable against services that are incidental to Slave Falls development, the new tramway of six miles—from Pointe du Bois to Slave Falls—accounting for some \$188,000.00. The building of this



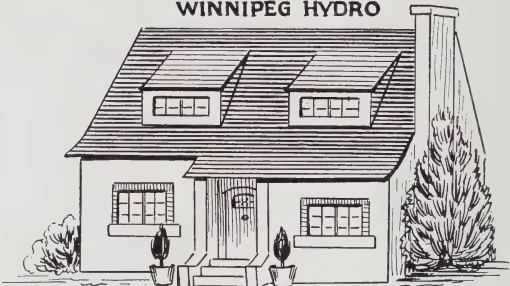
1926

UNITED STATES



365 K.W.H.

WINNIPEG HYDRO



2716 K.W.H.

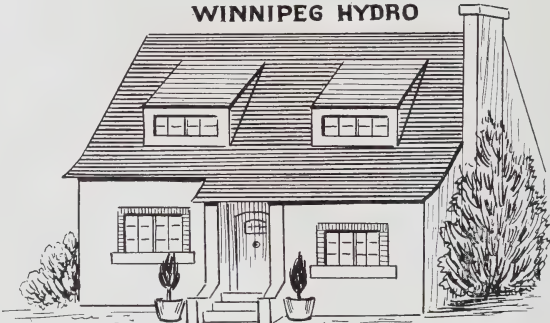
1927

UNITED STATES



400 K.W.H.

WINNIPEG HYDRO



3064 K.W.H.

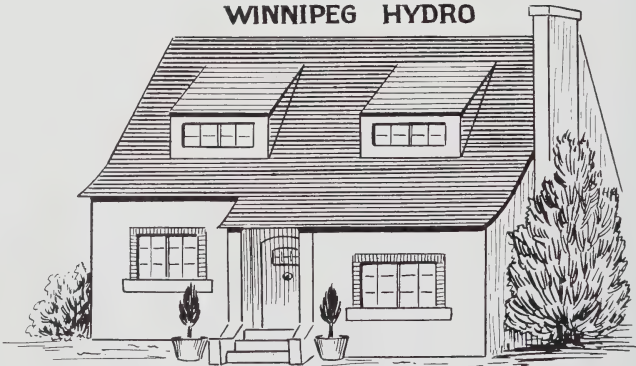
1928

UNITED STATES



418 K.W.H.

WINNIPEG HYDRO



3384 K.W.H.

COMPARISON OF ANNUAL DOMESTIC CONSUMPTION

Average per Customer in Kilowatt Hours



road and providing ready access to the new site means that the contractor for the general works will be able to make an expeditious start on the hydraulic works at Slave Falls.

The money spent on extensions to our distribution system, including wires, poles, meters, transformers, etc., approximated \$300,000.00. Another \$100,000.00 was spent on the completion of the rock excavation at Eight Foot Falls. This work can properly be regarded as part of the Slave Falls development.

The inauguration of the service from the Manitoba Power Company, for which a contract was signed two years ago, took place in September of last year, and accounts for capital expenditure for equipment, etc., of nearly \$100,000.00.

The rest of the capital expenditure is for miscellaneous items in different departments.

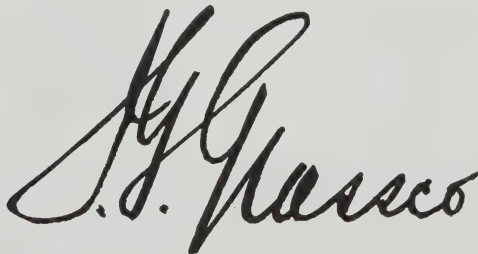
### *Statistical---*

During the year we installed 3,780 meters and removed 1,139, showing a net increase in our active meters in service of 2,641, bringing the grand total of active meters as at December 31st, 1928, to 63,263. In addition there are 11,241 flat rate services, making a total of 74,504.

The kilowatt hours generated and purchased slightly exceeded 400,000,000 for the year, being an increase of 12%.

### *Street Lighting---*

Once more a satisfactory year was experienced in the Street Lighting Department. It is interesting to note, in connection with this division, that the accrued Sinking Fund shows \$310,000.00 to apply against gross funded debt of \$768,000.00. Although there have been many changes and improvements made in street lighting equipment in the last 20 years, the above figures indicate a very healthy financial state, a 40% reserve being well able to take care of all depreciation and obsolescence. Since 1914 the number of street lamps, not including the small multiple lamps for bridges and special lighting, has increased from 1,700 to 4,369. The system has been kept fully up to date, with every advantage taken of improved methods of Street Lighting developed in recent years. Since 1912 there has been no less than \$450,000.00 expended on ornamental lighting, approximately all of which has been paid for, partly by the property owners and partly by the City at large.

A large, stylized handwritten signature in dark ink, reading "J. S. Nassco". The signature is written in a cursive style with large, sweeping loops.

MAY 1ST, 1929





CONSOLIDATED REVENUE  
AND  
EXPENSE ACCOUNT

By:—

Light and Power Earnings (Including Non- Operating Revenue).....	\$2,646,272.56
Steam Heating Earnings.....	300,629.52
Merchandise Sales.....	342,230.38
Interest on Investments.....	293,144.02
Adjustment, Profit and Loss, Steam Heating...	204.52
TOTAL REVENUE.....	<u>\$3,582,481.00</u>

To:—

Expenses, Operating and Management, Hydro..	\$1,038,849.22
Expenses, Operating and Management, Steam Heating.....	203,998.37
Cost of Appliances Sold, and Expenses.....	343,692.02
Fixed Charges, Hydro (Including Depreciation \$669,310.12).....	1,609,388.97
Fixed Charges, Steam Heating.....	100,664.34
Adjustment, Profit and Loss, Hydro.....	4,599.01
Consolidated Surplus for Year.....	<u>281,289.07</u>
	<u>\$3,582,481.00</u>

# CONSOLIDATED

## ASSETS

### CAPITAL ASSETS:

Property and Plant—	
Hydro . . . . .	\$18,329,015.81
Steam Heating. . . . .	1,106,234.07
	<hr/>
	\$19,435,249.88
Sundry Capital Assets. . . . .	14,418.56
Sinking Fund Invested with Trustees. . . . .	3,587,034.19
Unamortized Discount on Stock and	
Debentures. . . . .	361,983.51
Investment of Depreciation Reserve. . . . .	2,375,000.00
Cash in Bank. . . . .	304,776.56
	<hr/>
Total Capital Assets. . . . .	\$26,078,462.70

### CURRENT ASSETS:

Bank of Montreal Contingent Reserve \$	500,000.00
Bank of Montreal Revenue. . . . .	707,063.08
	<hr/>
Receivables—	
Light and Power Accounts. . . . .	303,869.16
Steam Heating Accounts. . . . .	48,836.01
Appliance Accounts. . . . .	228,321.75
Appliance Repairs. . . . .	6,242.08
Sundry and Miscellaneous. . . . .	23,087.12
	<hr/>
Inventories—	
Stores, General. . . . .	204,929.29
“ Generating Station. . . . .	66,409.41
“ Terminal and Substations. . . . .	20,084.39
“ Appliances and Supplies . . . . .	81,759.44
“ Garage. . . . .	2,963.40
	<hr/>
Accrued Interest, Bylaws 10575 and	
11758. . . . .	64,375.00
Sundry Current Assets. . . . .	22,132.84
Prepaid Insurance. . . . .	37,526.14
	<hr/>
Total Current Assets. . . . .	2,317,599.11
	<hr/>
Total Assets. . . . .	\$28,396,061.81



# BALANCE SHEET

## LIABILITIES

### CAPITAL LIABILITIES:

#### Funded Debt—

Hydro. . . . . \$18,327,000.00

Steam Heating. . . . . 1,100,000.00

\$19,427,000.00

#### Payables—

Overdraft, Bank of Montreal . . . . . 327,480.78

Accounts. . . . . 57,171.17

Total Capital Liabilities. . . . . \$19,811,651.95

### CURRENT LIABILITIES:

#### Payables—

Overdraft, Bank of Montreal . . . . . \$ 671,461.82

Accounts. . . . . 132,441.14

#### Accrued Liabilities—

Unmatured Interest of Funded Debt . . . . . 184,633.16

Unmatured Sinking Fund on Funded

Debt. . . . . 48,428.50

Appliance and Supplies (Reserve for

Interest and Collection on

Deferred Payments) . . . . . 18,265.74

Sundry Current Liabilities. . . . . 11,856.07

Total Current Liabilities. . . . . 1,067,086.43

### RESERVES:

Sinking Fund Reserve. . . . . \$ 3,587,034.19

Depreciation Reserve Fund. . . . . 2,689,006.98

Contingent and Insurance Reserve. . . . . 500,000.00

Revenue Surplus. . . . . 741,282.26

Total Reserves. . . . . 7,517,323.43

Total Liabilities. . . . . \$28,396,061.81

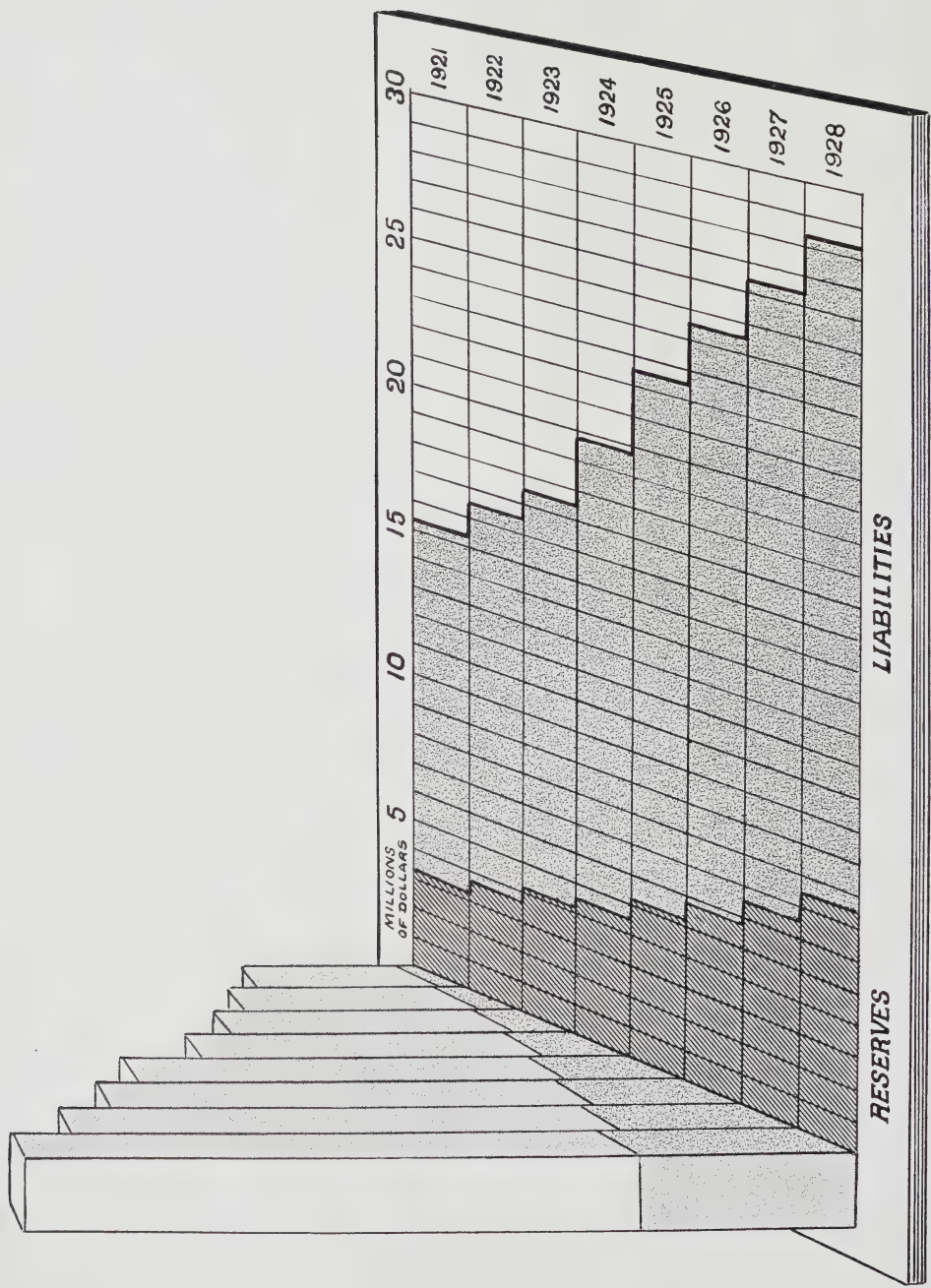


CHART OF FINANCIAL STRUCTURE  
Light and Power Division.



## WINNIPEG HYDRO ELECTRIC SYSTEM

## RECAPITULATION OF ANNUAL STATEMENTS

(HYDRO ELECTRIC SYSTEM ONLY)

For Year Ending April 30th	Total Assets	Total Reserve	Gross Earnings	Total Expense	Surplus for Year	No. of Customers	Units Generated and Purchased	Peak Load in H.P.
1913.....	\$ 6,623,663.56	\$ 20,436.52	\$ 545,644.18	\$ 629,077.28	\$ 83,432.90*	22,015	38,704,220	14,080
1914.....	7,847,501.39	360,901.50	867,621.47	785,723.51	81,897.96	29,732	60,337,635	19,550
1915.....	8,181,372.78	640,213.72	976,347.50	897,662.78	78,684.72	32,953	70,654,360	23,030
1916.....	8,630,710.80	928,914.92	995,511.37	915,781.70	79,729.67	34,345	75,634,750	26,130
1917.....	9,070,627.51	1,273,714.41	1,020,480.25	935,905.72	84,574.53	35,392	82,278,970	27,800
1918.....	9,535,173.11	1,615,618.68	1,056,281.88	1,001,541.82	54,740.06	36,343	85,336,830	28,800
1919.....	10,243,773.63	1,996,604.79	1,097,196.59	1,044,315.99	52,881.00	37,809	88,947,190	31,133
1920.....	11,763,354.28	2,406,145.18	1,279,469.41	1,099,189.88	180,279.53	39,877	99,524,550	35,000
Year Ending Dec. 31								
1921.....	15,397,571.80	3,458,407.16	1,572,150.24	1,599,427.45	27,277.21*	44,953	125,124,855	46,000
1922.....	16,657,895.27	3,743,896.36	1,659,725.50	1,645,116.25	14,609.25	48,501	144,509,429	51,000
1923.....	17,681,828.22	4,217,621.24	1,741,963.68	1,609,761.64	126,834.70	51,293	164,609,860	53,500
1924.....	19,878,993.08	4,688,630.07	1,863,175.05	1,754,854.56	110,084.68	57,265	200,520,080	64,000
1925.....	21,411,922.28	5,003,638.74	2,037,710.81	1,999,584.27	44,059.21	62,508	261,996,380	80,000
1926.....	23,301,029.79	5,945,107.96	2,456,978.46	2,321,142.19	135,836.27	65,674	324,994,510	95,000
1927.....	25,136,307.43	6,700,665.23	2,701,046.37	2,438,376.65	262,669.72	69,548	358,435,800	102,000
1928.....	27,046,898.75	7,512,361.32	2,939,416.58	2,654,298.84	285,117.74	74,504	400,668,600	108,500

\*Deficit.



HEAD OFFICE—55 PRINCESS STREET



INTERIOR OF SHOWROOM—55 PRINCESS STREET



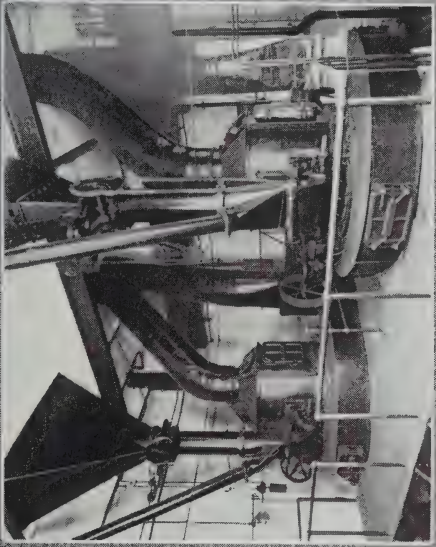


REFRIGERATOR DEPARTMENT IN SHOWROOM  
(Displaying General Electric Refrigerators)

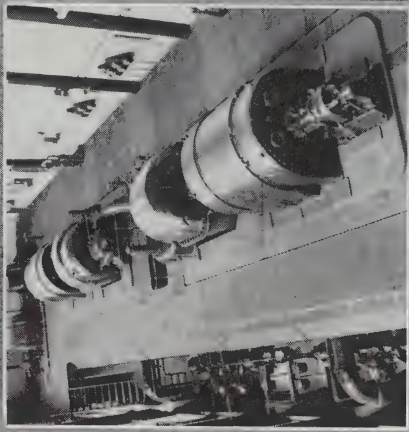


ORNAMENTAL STREET LIGHTING STANDARDS





Coal Pulverizers



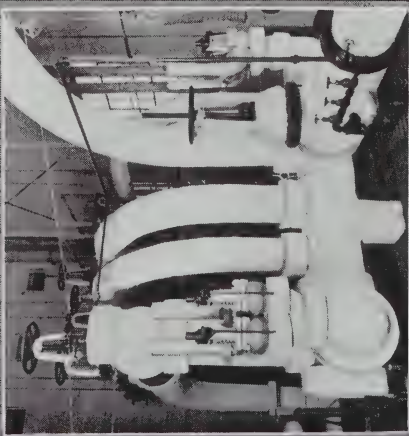
Standby Turbines



Central Steam Plant

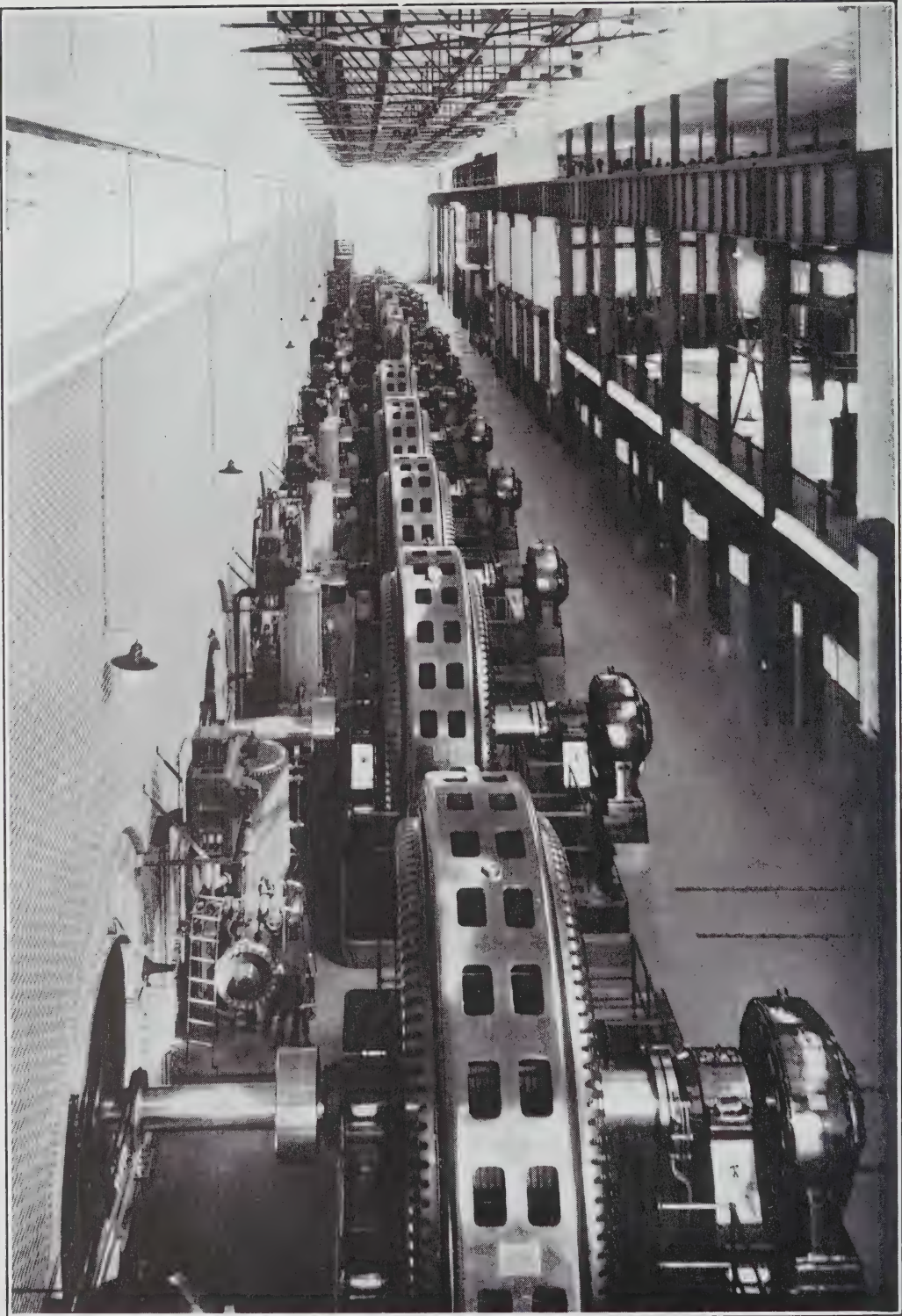


Operating Floor



Steam Reducing Piping





POWER HOUSE INTERIOR, POINTE DU BOIS

























